

In the Claims:

1-11 (canceled)

12. (previously presented) A semiconductor device manufactured using the following process:

providing a semiconductor device having at least one metal layer completed;

then applying a planarizing dielectric layer on top of the semiconductor device; and

then providing a hydrogen treatment until hydrogen diffuses throughout the semiconductor device.

13. (previously presented) The semiconductor device of Claim 12, wherein the hydrogen treatment includes heating the semiconductor device in a hydrogen rich environment.

14. (previously presented) The semiconductor device of Claim 12, wherein the hydrogen treatment includes applying hydrogen in situ by introducing hydrogen as a plasma to the semiconductor device.

15. (previously presented) The semiconductor device of Claim 12, wherein the planarizing dielectric layer includes a first layer of TEOS, a second layer of HSQ, and a third layer of TEOS.

16. (previously presented) The semiconductor device of Claim 12, wherein the planarizing dielectric layer includes a first layer of TEOS applied by PECVD.

17. (previously presented) The semiconductor device of Claim 12, wherein the planarizing dielectric layer includes a second layer of HSQ applied by coating applied over a first layer of dielectric material.

18. (previously presented) The semiconductor device of Claim 12, wherein the planarizing dielectric layer includes a third layer of TEOS applied by PECVD applied over two layer of dielectric material.

19. (previously presented) The semiconductor device of Claim 12, wherein the semiconductor device undergoes an N₂ bake after an HSQ layer of a multilayer planarizing dielectric layer is added.

20. (previously presented) The semiconductor device of Claim 12, wherein the semiconductor device undergoes the hydrogen treatment after a final layer of the planarizing dielectric layer is added.

21. (previously presented) A semiconductor device manufactured using the following process:

providing a semiconductor device having thereon at least one metal layer completed;
and

then providing a hydrogen treatment until hydrogen diffuses throughout the semiconductor device.

22. (currently amended) The semiconductor device of Claim ~~12~~ 21 wherein the hydrogen treatment includes heating the semiconductor device in a hydrogen rich environment.

23. (currently amended) The semiconductor device of Claim ~~12~~ 21 wherein the hydrogen treatment includes applying hydrogen in situ by introducing hydrogen as a plasma to the semiconductor device.

24. (previously presented) The semiconductor device of Claim ~~12~~ 21, wherein the planarizing dielectric layer includes a first layer of TEOS, a second layer of HSQ, and a third layer of TEOS.

25. (previously presented) The semiconductor device of Claim ~~12~~ 21, wherein the planarizing dielectric layer includes a first layer of TEOS applied by PECVD.

26. (previously presented) The semiconductor device of Claim ~~12~~ 21, wherein the planarizing dielectric layer includes a second layer of HSQ applied by coating applied over a first layer of dielectric material.

27. (previously presented) The semiconductor device of Claim ~~12~~ 21, wherein the planarizing dielectric layer includes a third layer of TEOS applied by PECVD applied over two layer of dielectric material.

28. (previously presented) The semiconductor device of Claim ~~12~~ 21, wherein the semiconductor device undergoes an N₂ bake after an HSQ layer of a multilayer planarizing dielectric layer is added.

29. (previously presented) The semiconductor device of Claim ~~12~~ 21, wherein the semiconductor device undergoes the hydrogen treatment after a final layer of the planarizing dielectric layer is added.